

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) An implantable sensor apparatus for taking readings from a patient in vivo, the sensor apparatus comprising:

an implantable sensor having a distal end with a sensor tip for direct contact with patient fluids;

a flush sleeve directed towards the sensor tip; and

a fluid conduit in fluid communication with the flush sleeve, wherein a fluid received in the fluid conduit in fluid communication with the flush sleeve is used to spray the sensor tip,

wherein the flush sleeve concentrically surrounds the implantable sensor around a generally common axis.

2. (Original) The sensor apparatus of claim 1, further comprising a connector fitting for supporting the implantable sensor within the patient.

3. (Original) The sensor apparatus of claim 1, wherein the fluid conduit contains a septum, and wherein a needle is used to pierce the septum to inject the fluid into the fluid conduit.

4. (Original) The sensor apparatus of claim 1, wherein the flush sleeve surrounds the implantable sensor in a tight fit connection.

5. (Original) The sensor apparatus of claim 4, wherein the flush sleeve contains at least one one-way valve near the sensor tip.

6. (Original) The sensor apparatus of claim 1, wherein the fluid conduit is located at a proximal end of the sensor.

7. (Original) The sensor apparatus of claim 6, wherein the proximal end of the sensor is covered by a protector sleeve.

8. (Currently amended) The sensor apparatus of claim 1, wherein the sensor is plugged into the connector fitting, and the connector fitting is ~~affixed~~ affixable internally to the patient.

9. (Original) The sensor apparatus of claim 1, wherein the fluid is a saline solution.

10. (Original) The sensor apparatus of claim 1, wherein the fluid contains an anti-coagulant.

A2
11. (Original) The sensor apparatus of claim 1, wherein the connector fitting is connected to a telemetry unit to transmit readings from the implantable sensor.

12. (Withdrawn) A method of cleaning a sensor tip of an implantable electrode sensor having the sensor tip in direct contact with patient fluid, the method comprising the steps of:

injecting fluid into a first end of a flush sleeve surrounding the sensor; and
spraying off the sensor tip with the injected fluid through at least one orifice located at a second end of the flush sleeve.

13. (Withdrawn) The method of claim 12, wherein the first end of the flush sleeve contains a fluid conduit and a septum, and wherein a needle is used to pierce the septum to inject the fluid into the fluid conduit.

14. (Withdrawn) The method of claim 12, wherein the flush sleeve surrounds the implantable sensor in a tight fit connection.

15. (Withdrawn) The method of claim 14, wherein the flush sleeve contains at least one one-way valve near the sensor tip.

16. (Withdrawn) The method of claim 14, wherein the portion of the sensor in contact with the first end of the flush sleeve is covered by a protector sleeve.

17. (Withdrawn) The method of claim 12, wherein the sensor is plugged into a connector fitting, and the connector fitting is affixed internally to the patient.

18. (Withdrawn) The method of claim 11, wherein the fluid is a saline solution.

19. (Withdrawn) The method of claim 11, wherein the fluid contains an anti-coagulant.

A2

20. (Withdrawn) A system for cleaning a sensor tip of an implantable electrode sensor having the sensor tip in direct contact with patient fluid, the system comprising:
means for injecting fluid into a first end of a flush sleeve surrounding the sensor; and
means for spraying off the sensor tip with the injected fluid through at least one orifice located at a second end of the flush sleeve.

21. (New) An implantable multi-lumen sensor apparatus for taking readings from a patient in vivo, the sensor apparatus comprising:
an implantable sensor having a distal end with a sensor tip for direct contact with patient fluids in an inner lumen; and
an outer lumen comprising a flush sleeve surrounding the inner lumen in a generally coaxial manner.

22. (New) The sensor apparatus of claim 21, wherein the flush sleeve surrounds the inner lumen in a tight fit connection.

A2

23. (New) The sensor apparatus of claim 22, wherein the flush sleeve contains at least one one-way valve near the sensor tip.